II. CLAIMS

1. (Original) A polynucleotide directed towards a gene of a catalytic subunit of human telomerase, characterized in that the polynucleotide specifically interacts with the mRNA of the catalytic subunit of human telomerase in at least two target sequence regions, 2176 to 2250 and 2296 to 2393, in accordance with accession number AF015950.

2. (Previously Presented) The polynucleotide according to claim 1, wherein the polynucleotide interacts with target sequence regions selected from the group comprising 2183-2205, 2206-2225, 2315-2334, 2317-2336, 2324-2346, 2331-2350 and/or 2333-2352.

3. (Previously Presented) The polynucleotide according to claims 1 wherein the sequence region and/or the polynucleotide is modified by addition, amplification, inversion, missense mutation, nonsense mutation, point mutation, deletion and/or substitution.

4. (Previously Presented) The polynucleotide according to claims 1, wherein the polynucleotide is immobilized.

5. (Previously Presented) The polynucleotide according to claims 1, wherein the polynucleotide is a nucleic acid construct or a derivative thereof.

6. (Previously Presented) The polynucleotide according to claim 5, wherein the polynucleotide is fused or complexed with another molecule supporting the directed transport to the target site, the uptake in and/or distribution inside a target cell.

7. (Previously Presented) The polynucleotide according to claim 5 wherein the nucleic acid

construct is an antisense oligonucleotide, a DNAzyme, a peptide nucleic acid, a ribozyme and/or an siRNA.

8. (Previously Presented) The polynucleotide according to claim 7, wherein the antisense oligonucleotide is modified by phosphothioate bonds and/or other chemical modifications.

9. (Previously Presented) The polynucleotide according to claims 1 wherein the sequence region of the hTERT-mRNA, to which the polynucleotide is complementary, is selected from the group comprising 2183-2205, 2206-2225, 2315-2334, 2317-2336, 2324-2346, 2331-2350 and/or 2333-2352.

10. (Previously Presented) A pharmaceutical composition comprising a polynucleotide according to claims 1 in combination with a pharmaceutically tolerable carrier.

11. (Previously Presented) A kit comprising: a polynucleotide according to claim 1 and a pharmaceutically tolerable carrier.

12. Cancelled

13. (Previously Presented) Method for diagnosis, prophylaxis, therapy, follow-up and/or aftercare of diseases associated with cell growth, differentiation and/or division, comprising using a polynucleotide according to claim 1, optionally in combination with a pharmaceutically tolerable carrier.

14. (Previously Presented) The method according to the preceding claim, wherein the disease is a tumor.

15. (Previously Presented) The method according to claim 14, wherein the tumor is a solid tumor or a leukemia.

16. (Previously Presented) The method according to claim 15, wherein the solid tumor is a tumor of the urogenital tract and/or gastrointestinal tract.

17. Canceled.

18. Canceled.

19. (Previously Presented) The method according to claim 16, wherein the tumor of the urogenital tract is a bladder carcinoma and/or a metastase of said tumor.

20. (Previously Presented) The method according to claim 13, wherein the follow-up is monitoring the effectiveness of an anti-tumor treatment.

21. (Previously Presented) The method according to claims 13 wherein the polynucleotide is used in a combination therapy.

22. Canceled.

23. (Previously Presented) The method according to claim 22, wherein the combination therapy comprises an adjuvant biologically specified form of therapy.

24. (Previously Presented) The method according to claim 23, wherein said form of therapy is an immune therapy.

25. (Previously Presented) The method according to claims 21, wherein the combination therapy is a gene therapy and/or a therapy using a polynucleotide against the same or other target molecule.

26. (Previously Presented) The method according to claims 13 for increasing the sensitivity of tumor cells to cytostatic agents and/or radiation.

27. (Previously Presented) Method for inhibiting the vitality, the proliferation rate of cells, for inducing apoptosis and/or cell cycle arrest comprising the step of using a polynucleotide according to claim 1.